

Claims

1.-4. (canceled)

5. (new) An ultrasonic pick-up for acoustically diagnosing machines, comprising:  
a piezoelectric measuring element for generating an electric measurement signal;  
a housing that includes the piezoelectric measuring element;  
an auxiliary power generated from the electric measurement signal;  
a electronic circuit operatively connected to the piezoelectric measuring element, the electronic circuit adapted to convert the electric measurement signal to a form suitable for transmission to an evaluation device located outside of the housing; and  
a frequency separating filter for separating the electric measurement signal into:  
an evaluation signal in a first frequency range, and  
a supply signal in a second frequency range.

6. (new) The ultrasonic pick-up according to claim 5, further comprising a rectifying device for rectifying and smoothing the supply signal.